Results of Testing

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Cyclohexanone	108-94-1	HEGTOXCHRM Mammalian cytogenetics assay	Non-TSCA Protocol/ Guideline (docket OPTS-42046)	Chinese hamster ovary (CHO)	*in vitro*, 1 hr	2.5, 5.0, 7.5, 10.0, 12.5 µL/mL	Not applicable	The test material did not induce significant increases in chromosomal aberrations with or without S9 activation.	49 FR 44142; 11/2/84, OTS0507477
Cyclohexanone	108-94-1	HEGTOXDNAF Sister chromatid exchange	Non-TSCA Protocol/ Guideline (docket OPTS-42046)	Chinese hamster ovary (CHO)	*in vitro*, 1 hr	2.5, 5.0, 7.5, 10.0, 12.5 µL/mL	Not applicable	When treated without S9 metabolic activation, increases in SCE (sister chromatid exchange) frequency were seen at the higher concentrations. The test material with S9 metabolic activation did not induce SCEs.	49 FR 44142; 11/2/84, OTS0507477
Cyclohexanone	108-94-1	HEGTOXMUTA Sex-linked recessive lethal test (Voluntary test)	Non-TSCA Protocol/ Guideline (docket OPTS-42046)	*Drosophila melanogaster*	inhalation, 4 hr	1900 ppm (36% saturation)	Not specified	No evidence of treatment-induced increased sex-linked recessive lethals was seen.	52 FR 2152: 1/20/87, OTS0511205
Cyclohexanone	108-94-1	HEGTOXMUTA Gene mutation (CHO/HPRT)	Non-TSCA Protocol/ Guideline (docket OPTS-42046)	Chinese hamster ovary (CHO)	*in vitro*, 1 hr	2.5, 5.0, 7.5, 10.0, 12.5 µL/mL	Not applicable	Cytotoxicity occurred at a concentration of 12.5 µL/mL. No evidence of increased mutations at the HPRT locus was seen in any of these assays, with or without S9 activation.	49 FR 44142; 11/2/84, OTS0507477
Cyclohexanone	108-94-1	HERTOXTERA Developmental study	Non-TSCA Protocol/ Guideline (docket OPTS-42046)	mice	inhalation, 6 h/d, gestation days 6-17	0, 1400 ppm (nominal)	30 mated females	Maternal toxicity occurred in treated mice (decreased mean body weight, weight gain, mean uterine weight, uterine implantation, and number of viable fetuses per pregnant animal). Fetuses showed decreased body weights. No treatment-related effects were noted on external, skeletal, or visceral development.	49 FR 44142; 11/2/84, OTS0507478
Cyclohexanone	108-94-1	HERTOXTERA Developmental toxicity	Non-TSCA Protocol/ Guideline (docket OPTS-42046)	rats	inhalation, 6 hr/d, gestation days 6-19	0, 300, 650, 1400 ppm (nominal)	26 mated females	Maternal toxicity was evident in the high-dose group (decreased body weight and weight gain). No evidence of reproductive toxicity was noted. Fetuses from the high dose groups also exhibited decreased body weights. At the high-dose, the incidence of fetuses with at least one ossification variation was increased.	49 FR 44142; 11/2/84, OTS0507478
Cyclohexanone	108-94-1	HERTOXTERE Male reproductive performance (Voluntary test)	Non-TSCA Protocol/ Guideline (docket OPTS-42046)	rats	inhalation, 6 hr/d, 5 d/wk, for 2 generations	0, 250, 500, 1000 ppm (nominal)	30/sex /generation /concentration group	High-concentration F1 males showed decreased survival, body weight, and fertility, and F2 progeny also had decreased survival rates and body weights. High-concentration F1 males were rested for 2 days following the last exposure, then mated to determine whether effects were reversible. In this re-test, the results showed fertility was comparable to controls.	52 FR 21252; 1/20/87, OTS0511208

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Cyclohexanone	108-94-1	HERTOXTERE 2-generation reproduction study	Non-TSCA Protocol/ Guideline (docket OPTS-42046)	rats	inhalation, 6 hr/d, 5 d/wk; 33 wk	0, 250, 500, 1000, 1400 ppm (nominal)	30/sex/dose	F0 test animals were exposed to 0, 250, 500, or 1,000 ppm during the first generation (F0). The F1 generation animals were exposed to 0, 250, 500, or 1,400 ppm of the test material. High-dose F0 animals showed transient effects for the first 2 exposure days (clinical signs such as ataxia, lacrimation, and irregular breathing); no effects were seen on body weight. F1 generation body weight was reduced in 1,400 ppm males. No effects were noted on reproductive indices.	51 FR 27598; 8/1/86, OTS0511206